Village of Pinckney Water and Sewer Rate Review

09/12/2022

Village of Pinckney Water/Sewer Rate Review

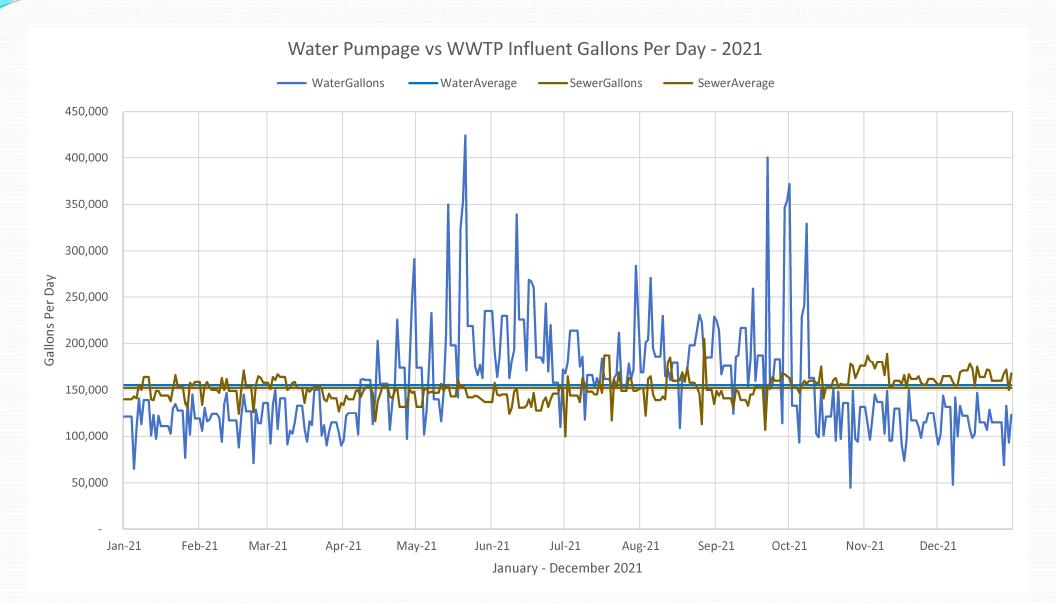
Challenges

The village has been operating in a deficit position for at least the past three years.

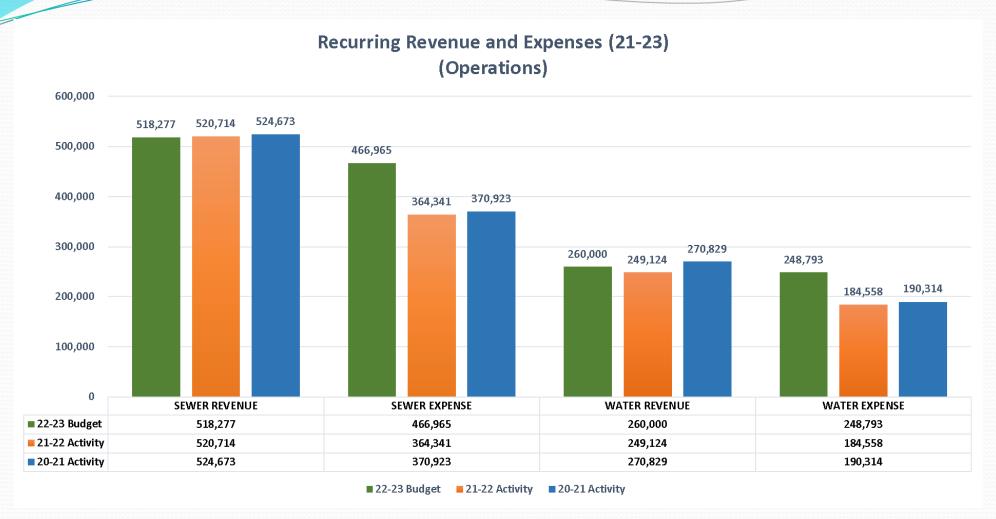
- The current rate structure, rates, and revenues are insufficient to consistently fund critical capital improvement programs and maintain an operational system.
- Capital improvements are planned that require significant funds within a few years.
- A capital improvement program has been proposed that will require significant investments in both the water and sewer systems over the next few years.

Village of Pinckney Water and Sewer Utility Rate Study

FINANCIAL OVERVIEW and Assumptions



Revenue/Expense 2021-2023 budget



REVENUES

Sewer Revenues have declined over the past three years, in part due to completion of a SAW Grant, reduced usage, and other revenue sources.

Water Revenue has held somewhat steady due to rate increases, but reduced usage has resulted in a flat revenue stream overall.

EXPENSES

Expenses dipped slightly in the last fiscal year, but have rebounded for 2022-2023.

For the coming fiscal year, recurring expenses for Water are up 19.3%, and recurring Sewer expenses are up 18.1%.

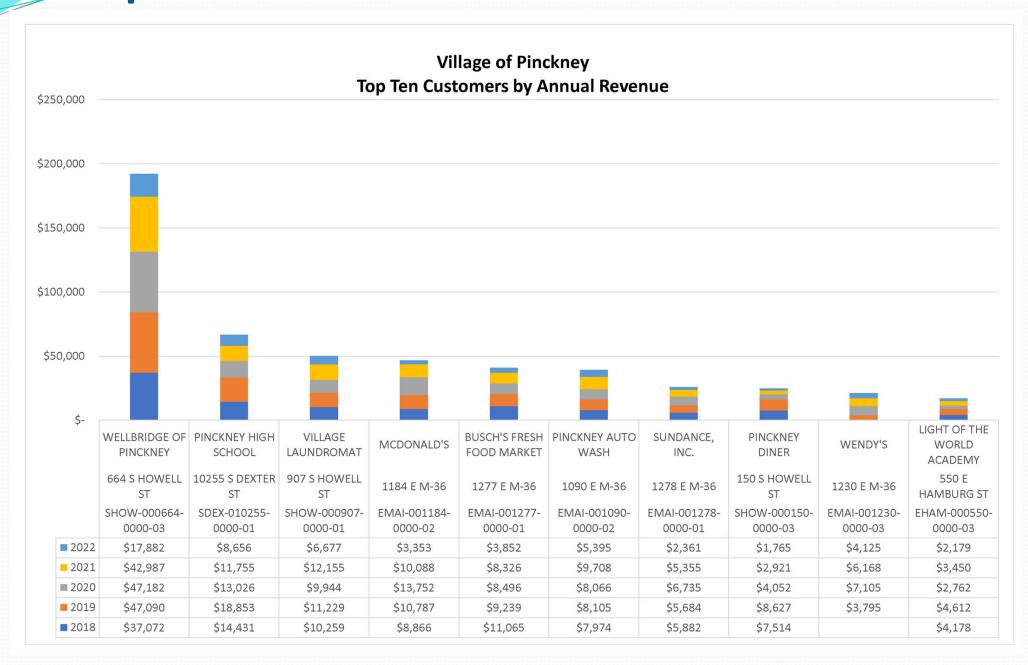
Revenue/Expense and 2022-2023 budget SEWER BUDGET ANALYSIS

		2022-23	2021-22	2020-21
Change f	rom 2021	PRES APPROVED	ACTIVITY	ACTIVITY
Change i	rom 2021	BUDGET	1 HKU 06/30/22	
	(6.206.00)	F40 277	F20 74.4	F2.4.672
	• • •	•	•	524,673
	8,014.00	23,000	21,783	14,986
		0	47,373	110,554
0.2%	1,618.00	541,277	589,870	650,213
	96,042.00	466,965	364,341	370,923
		0	66,059	117,339
	16,367.00	210,000	187,387	193,633
	22,024.00	79,880	73,538	57,856
		12,501	879	3,123
18.1%	134,433.00	769,346	692,204	742,874
	(94,424.00)	74,312.00	178,156.00	168,736.00
	-	-	(18,686.00)	(6,785.00)
	(16,367.00)	(210,000.00)	(187,387.00)	(193,633.00)
	(22,024.00)	(79,880.00)	(73,538.00)	(57,856.00)
	0	-12501	-879	-3123
-43.3%	(132,815.00)	(228,069.00)	(102,334.00)	(92,661.00)
	18.1%	96,042.00 16,367.00 22,024.00 18.1% 134,433.00 (94,424.00) - (16,367.00) (22,024.00) 0	Change from 2021 BUDGET (6,396.00) 518,277 8,014.00 23,000 0 0 0.2% 1,618.00 541,277 96,042.00 466,965 0 16,367.00 210,000 79,880 12,501 18.1% 134,433.00 769,346 (94,424.00) 74,312.00 - (16,367.00) (210,000.00) (22,024.00) (0 -12501	Change from 2021 BUDGET THRU 06/30/22 (6,396.00) 518,277 520,714 8,014.00 23,000 21,783 0 47,373 0.2% 1,618.00 541,277 589,870 96,042.00 466,965 364,341 0 66,059 16,367.00 210,000 187,387 22,024.00 79,880 73,538 12,501 879 18.1% 134,433.00 769,346 692,204 (94,424.00) 74,312.00 178,156.00 (16,367.00) (210,000.00) (187,387.00) (22,024.00) (79,880.00) (73,538.00) 0 -12501 -879

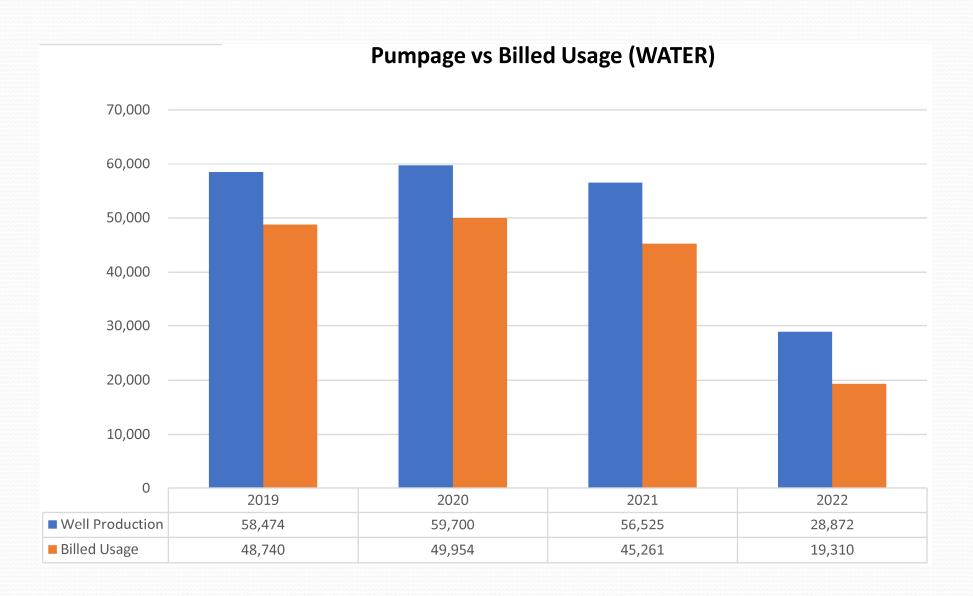
Revenue/Expense and 2022-2023 budget WATER BUDGET ANALYSIS

WATER			2022-23 PRES APPROVED	2021-22 ACTIVITY	2020-21 ACTIVITY
	Change fr	om 2021	BUDGET	THRU 06/30/22	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Revenue		•			
Rate Revenue		(10,829.00)	260,000	249,124	270,829
Non Rate Revenue Recurring		539.00	11,000	9,867	10,461
Non Rate Revenue Non Recurring			0	3,043	8,555
	-3.6%	(10,290.00)	271,000	262,034	289,845
= Expenditures					
Recurring O&M Expenditures		58,479.00	248,793	184,558	190,314
Non-Recurring Expenditures			0	0	0
Depreciation		11,018.00	155,000	132,132	143,982
Debt Interest		-	0	0	0
Capital Outlay			1	0	25,969
	19.3%	69,497.00	403,794	316,690	360,265
Net					
Recurring		(68,769.00)	22,207.00	74,433.00	90,976.00
Non Recurring		-	-	3,043.00	8,555.00
Depreciation		(11,018.00)	(155,000.00)	(132,132.00)	(143,982.00)
Debt Interest		-	-	-	-
Cap Outlay		0	-1	0	-25969
_	-13.3%	(79,787.00)	(132,794.00)	(54,656.00)	(70,420.00)

Top Ten Customers



Well production vs billed usage



Capital Improvement Summary

			Fiscal Year	1	Fiscal Year	Fi	iscal Year	F	iscal Year	F	iscal Year		Fiscal Year	י	Fiscal Year	F	iscal Year	F	iscal Year
			2021	Ι.	2022		2023	ا ا	2024		2025		2026	Ι.	2027	_	2028	_	2029
	Funding		Total Cost		Total Cost	Т	otal Cost		Total Cost	1	Total Cost		Total Cost		Total Cost		Total Cost	T	Total Cost
WATER																			
Beginning Available Reserves		\$	2,513,577	\$	2,513,577	\$	2,066,077	\$	1,734,377	\$	1,355,677	\$	1,391,177	\$	1,296,677	\$	1,293,177	\$	1,339,677
Less Operational Reserves (O&M)				\$	400,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Available for CapA		\$	2,513,577	\$	2,113,577	\$	2,066,077	\$	1,734,377	\$	1,355,677	\$	1,391,177	\$	1,296,677	\$	1,293,177	\$	1,339,677
	Recaptured																		
Current Year Add to Reserves (% depreciation basis)	\$ 46,500					\$	46,500	\$	46,500	\$	46,500	\$	46,500	\$	46,500	\$	46,500	\$	46,500
Water Major Capital Improvements								\$	14,000										
Water Tower Cathode														\$	25,000				
6" drain					500														
8" with gatewell					15,000														
16" with gatewell					16,000														
16" with gatewell					16,000														
Tower Sealant												\$	120,000						
PO4 Scale & Metering Pump & Controls														\$	25,000				
CL2 Scale & Metering Pump & Controls																			
CL2 analyzer										\$	5,000								
#2 Generator Permanent for Well Fields 150K																		\$	60,000
Well #2 Well Pump																			
Hamburg St Water Main extension	CapA					\$	378,200	\$	378,200										
Pressure Transducer	'						,		•				3,000						
Meter for Well #1 water													4,000						
Meter for Well #2 water													4,000						
Heater - explosion proof								\$	3,000										
Auto Xfr Switch Surge Protection								-	•			Ś	10,000						
Valve Wrench Turner										Ś	6,000	•	,						
Well Pump	CapA							\$	30,000	•	,								
Total Water Capital Improvements	\$ 1,147,900	\$	-	\$	47,500	\$	378,200	\$	<u> </u>	\$	11,000	\$	141,000	\$	50,000	\$	-	\$	60,000
Balance CapA Reserves (WATER)		Ś	2,513,577	Ś	2.066,077	ć	1,734,377	ć	1.355.677		1,391,177	Ś	1.296.677	ć	1,293,177	ć	1.339,677	ć	1,326,177

Capital Improvement Summary

			Fiscal Year	П	iscal Year	F	iscal Year												
			2021		2022		2023		2024		2025		2026		2027		2028		2029
	Funding		Total Cost		Total Cost	-	Total Cost		Total Cost	T	Total Cost	-	Total Cost	1	Fotal Cost		otal Cost	1	Total Cost
SEWER																			
Beginning Available Reserves		\$	1,729,625	\$	1,729,625	\$	1,008,625	\$	454,050	\$	(95,525)	\$	(327,525)	\$	(434,525)	\$	(371,525)	\$	(308,525
Less Operational Reserves (O&M)				\$	626,000			\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Available for CapA		\$	1,729,625	\$	1,103,625	\$	1,008,625	\$	454,050	\$	(95,525)	\$	(327,525)	\$	(434,525)	\$	(371,525)	\$	(308,525
	Recaptured																		
Current Year Add to Reserves (% depreciation basis)	\$ 63,000			\$	(75,000)	\$	63,000	\$	63,000	\$	63,000	\$	63,000	\$	63,000	\$	63,000	\$	63,000
Sewer Major Capital Improvements																			
Sand Filter Bed																			
Pontoon Boat with Lift				\$	20,000														
WWTP Roof						\$	25,000												
Valve Replacement												\$	170,000						
Unadilla - 600 ft of 8"								\$	225,000										
Replace 1997 Generator									45,000										
Knollwood - 800'											295,000								
W Hamburg St	CapA					\$	342,575	\$	342,575										
N Marion to N Mill behind businesses	CapA					\$	250,000												
Total Sewer Capital Improvements	\$ 2,515,150	\$	-	\$	20,000	\$	617,575	\$	612,575	\$	295,000	\$	170,000	\$	-	\$	-	\$	-
Balance CapA Reserves (SEWER)		Ś	1,729,625	Ś	1,008,625	ć	454,050	ć	(95,525)	ć	(327,525)	ć	(434,525)	ć	(371,525)	ć	(308,525)	ć	(245,525

Water and Sewer Billing Rate Options

Rate Structure Basic Requirements

The proposed rate structure assumes the following criteria and assumptions:

- Water and Sewer Rates must be set at levels that will allow the system to operate in a financially stable condition and protect the health, safety, and welfare of the utility's customers.
- Fixed costs to operate and maintain the system must be covered on an equitable basis across all customers based on a standard formula.
- Costs for repairs and capital improvements to the system are shared on an equitable basis across all customers <u>based on a standard formula.</u>
- A usage charge for actual water or sewerage services consumed. The customer
 has the ability to reduce their costs through reduced usage, avoiding the
 commodity charge(s). All customers pay the same rate for water and sewer
 usage.

Rate Model Assumptions

The proposed rate structure includes the following criteria and assumptions:

- MEUs are considered to be constant and will not increase dramatically
- Debt Service will be a new separate charge based on MEU and debt service requirement.
- Depreciation recapture is variable based on village goals and recommendations.
- Eventual goal is 100% recovery of the depreciation cost. This will provide an ongoing and future funding source for capital improvements and potentially reduce the need for future debt

What is a "Meter Equivalent Unit"?

Your Home is 1 MEU



A single MEU is a unit of measure used to represent the average capacity and usage of a single-family residential dwelling.

It is based on meter size and type of use.

Larger water services will have a multiple of the MEUs assigned based on their capacity and meter size.

- A "Meter Equivalent Unit" (REU) of 1 is assumed for all residential users with a meter size up to 1".
- Commercial, educational, or residential properties with meters larger than 1" are charged <u>proportionally</u> to the size of the meter installed based on the American Water Works Association national standard. Larger meters bear a larger proportion of the system's capacity costs.



For example, under the AWWA standard, a nursing home, school, or retail facility with a 2" meter is the equivalent of eight (8) residential homes. They would be assigned 8 "MEU"

The Proposed Rate Structure

Three Cost Components are used for this rate structure:

- Capacity The fixed costs to operate the system
 - Operations and Maintenance, administration, contractors, fixed overhead
 - Costs are allocated across all users based on their proportion of the total system
- Commodity Variable charge based on individual usage (water or sewer) X a usage rate
- Debt Service A specific fixed charge based on the customer's proportion of outstanding debt obligations, including principal and interest.

For 2022-2023, the forecast costs for these components is shown below

~ ~	Cost Center	Water	Sewer	Total
X -	O&M Costs	248,793	466,965	715,758
	Depreciation	155,000	210,000	365,000
	Debt Service Costs *	-	79,880	79,880
	Costs to Recover	403,793	756,845	1,160,638

^{*} Debt Service figures do not include principal payment of about \$70,000

Village of Pinckney MEU Calculations Based on existing base rate setup

Using the existing BS&A historical billing data, we can summarize the number of base rate items for each size and customer account. That is translated that to a Meter Equivalent Unit for use in rate setting.

Summary of Base Rate and Fire Line Billing Items by Quarter

Billing Items by	Quarter and Rate			UBYear (QTR				
				2021				2022	
TYPE	Rate	SIZE	Cycle	1Q	2Q	3Q	4Q	1Q	2Q
SEWER	SEWER BASE 1 1/2"	1-1/2"	METERED	11	12	11	11	11	11
	SEWER BASE 1"	1"	METERED	15	15	15	15	15	15
	SEWER BASE 2"	2"	METERED	2	2	2	2	2	2
	SEWER BASE 3"	3"	METERED	3	3	3	3	3	3
	SEWER BASE 3/4"	3/4"	METERED	642	648	649	643	642	649
			FLAT	159	161	159	158	158	159
	SEWER BASE 4"	4"	METERED	1	1	1	1	1	1
SEWER Total				833	842	840	833	832	840
WATER	2" FIRE LINE RATE	N/A	METERED	2	2	2	2	2	2
	4" FIRE LINE RATE	N/A	METERED	3	3	3	3	3	3
	6" FIRE LINE RATE	N/A	METERED	3	3	3	3	3	3
	8" FIRE LINE RATE	N/A	METERED	1	1	1	1	1	1
	WATER BASE RATE 1"	1"	METERED	20	21	20	21	21	21
	WATER BASE RATE 1-1/2"	1-1/2"	METERED	10	11	10	10	10	10
	WATER BASE RATE 2"	2"	METERED	2	2	2	2	2	2
	WATER BASE RATE 3'	3"	METERED	2	2	2	2	2	2
	WATER BASE RATE 3/4"	3/4"	METERED	662	666	669	662	661	668
WATER Total				705	711	712	706	705	712

MODEL#1

Commodity

All Costs - (All Operating Costs, some depreciation)

- Covers all costs to operate system
- Covers increased recurring costs for water and sewer
- · Covers sewer debt service as separate component for all customers with sewer service
- Covers 100% of the depreciation expense
- Commodity rates increase by \$3.29 per unit
- Base rate increase of \$91 of base charges per billing cycle (\$360 per year)

based on usage

Village of Pinckney Water and Sewer Rate Study FY 22-23

to Recapture		(n 1 .)		100	
o necaptare		(Budget)		R	ecapture
100%	\$	155,000	=	\$	155,000
100%	\$	210,000	=	\$	210,000
	\$	365,000	Total Recapture	\$	365,000
		,	Not Recovered	\$	-
ase/Fixed	C	ommodity			
35.00%		65.0%	•		
35.00%		65.0%			
100%		0%			
	100% ase/Fixed 35.00% 35.00%	100% \$ \$ \$ ase/Fixed Co 35.00% 35.00%	\$ 210,000 \$ 365,000 ase/Fixed Commodity 35.00% 65.0%	\$ 210,000 = Total Recapture \$ 365,000 Not Recovered ase/Fixed Commodity 35.00% 65.0%	\$ 210,000 = \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$

Cost Distribution		г	Total Costs		Fixed	Commodity
					35%	65%
Ope	rations and Ma	intenance	\$ 248,793	\$	87,078	\$ 161,715
	Capi	ital Assets	\$ 2	\$	(41)	\$ 2
	Depreciation	Recapture	\$ 155,000	\$	54,250	\$ 100,750
	Fixed Base O	&M Costs	\$ 403,793	\$	141,328	\$ 262,465
	Debt :	Service	\$ -	\$	-	\$ -
	Total W	ater Costs	\$ 403,793	\$	141,328	\$ 262,465
				Α	nnual Rate or	
Rate Breakdown		Cost	MEU/Usage		Unit Rate	Per billing cycle
Fixed Base O&M Costs	\$	141,328	812.5	\$	173.94	\$ 43.49
Debt Service	\$	-	812.5	\$	-	\$ -

#1 - AllCostsModel - All costs including full depreciation

* Includes new sewer debt component

	Model Rate	Current Rate	Billing Cycle Change \$
Base Rates		•	
Water Base Rate	\$43.49	\$25.40	\$18.09
Sewer Base Rate	\$61.22	\$32.75	\$28.47
Commodity Rates			
Water Commodity	\$5.80	\$3.70	\$2.10
Sewer Commodity	\$8.67	\$7.48	\$1.19
Sewer Debt Service	\$38.72	\$0.00	\$38.72

Cost Distribution		Total Costs		Fixed		Commodity
				35%		65%
Operations an	d Maintenance	\$466,965		\$163,438	\$	303,527
	Capital Assets	\$12,501		\$4,375	\$	8,126
Deprecia	tion Recapture	\$210,000		\$73,500	\$	136,500
Fixed B	\$689,466		\$241,313	\$	448,153	
	Debt Service	\$152,626		\$152,626	\$	-
То	tal Sewer Costs	\$ 842,092	\$	393,939	\$	448,153
			An	nual Rate or		
Rate Breakdown	Cost	MEU/Usage		Unit Rate		Per billing cycle
Fixed Base O&M Costs	\$241,313	985.5		\$244.86	\$	61.22
Debt Service	\$152,626	985.5		\$154.87	\$	38.72
Commodity	\$448,153	51,691	\$8.67			based on usage
\$842,092	\$842,092					

MODEL #1 – All Costs

(All Operating Costs, some depreciation)

EXAMPLE

3/4" Water/Sewer Customer

Meter Size Water Units Sprinkler/Irrigation Sewer Only?

0.75 12,750

1.00 AWWA MEU

12,750

(Gallons)

		Example New Bill Modeled Rates Using Current Rates								ge
	M	odel Rate	Units/Qty	New Bill		Current Rate	Units/Qty	Current Bill	\$ Change	Monthly
Water Charges										
Water RTS (O&M)	\$	43.49	1.0	\$43.49	\$	25.40	1.0	\$25.40	\$18.09	\$6.03
Water Commodity	\$	5.80	12,750	\$73.95	\$	3.70	12,750	\$47.18	\$26.78	\$8.93
Sewer Charges (Metered)										
Sewer RTS (O&M)	\$	61.22	1.0	\$61.22	\$	32.75	1	\$32.75	\$28.47	\$9.49
Sewer Debt	\$	38.72	1.0	\$38.72	\$	-	1	\$0.00	\$38.72	\$12.91
Sewer Commodity	\$	8.67	12,750	\$110.54	\$	7.48	12,750	\$95.37	\$15.17	\$5.06
	Tota	I		\$327.92				\$200.70	\$127.22	\$42.41

3" Water/Sewer Customer

Meter Size **Water Units** Sprinkler/Irrigation Sewer Only?

3.00 703,000 216,100

17.50 AWWA MEU

703000

(Gallons)

Sewer Only:		NO								
		Examp	ple New Bill Modeled	Rates	Chang	ge				
	I	Model Rate	Units/Qty	New Bill		Current Rate	Units/Qty	Current Bill	\$ Change	Monthly
Water Charges										8
Water RTS (O&M)	\$	43.49	17.5	\$761.08	\$	616.06	1.0	\$616.06	\$145.02	\$48.34
Water Commodity	\$	5.80	703,000	\$4,077.40	\$	3.70	703,000	\$2,601.10	\$1,476.30	\$492.10
Irrigation Commodity	\$	5.80	216,100	\$1,253.38	\$	3.70	216,100	\$799.57	\$453.81	\$151.27
					l					I
Sewer Charges (Metered)										
Sewer RTS (O&M)	\$	61.22	17.5	\$1,071.26	\$	493.76	1	\$493.76	\$577.50	\$192.50
Sewer Debt	\$	38.72	17.5	\$677.56	\$	*	1	\$0.00	\$677.56	\$225.85
Sewer Commodity	\$	8.67	703,000	\$6,095.01	\$	7.48	703,000	\$5,258.44	\$836.57	\$278.86
	Tot	tal		\$13,935.68				\$9,768.93	\$4,166.75	\$1,388.92

MODEL #2 - D30

(30% Depreciation, Distribute across all components

- · Adds sewer debt service as separate component for all customers with sewer service
- Covers increased recurring costs for water and sewer
- Commodity rate Water/Sewer customers \$.12 per unit increase (1% commodity rate increase)

Village of Pinckney Water and Sewer Rate Study FY 22-23

		Ft	ull Depreciation				Depreciation		
Model parameters	% to Recapture		(Budget)				Recapture		
Water Depreciation	30%	\$	155,000		=	\$	46,500		
Sewer Depreciation	30%	\$	210,000		1=	\$	63,000		
Total Depreciation		\$	365,000	Total Recapture		\$	109,500		
				No	t Recovered	\$	(255,500)		
Cost Distribution	Base/Fixed	Commodity							
Water O&M	35.00%		65.0%						
Sewer O&M	35.00%		65.0%						
Sewer Debt	100%		0%						
Water Model - O&N	1 @ 35% Fixed	Cl	narge and 659	% C	ommodity/U	sa	ge based		
						_			
Cost Distribution	1		Total Costs		Fixed		Commodity		
Commission Commission Commission (Commission Commission					35%		65%		
Operations a	and Maintenance	\$	248,793	\$	87,078	\$	161,715		
	Capital Assets	\$	-	\$	-	\$			
Depre	ciation Recapture	\$	46,500	\$	16,275	\$	30,225		
Fixed	Base O&M Costs	\$	295,293	\$	103,353	\$	191,940		
	Debt Service	\$	-	\$	17.1	\$	-		
,	Total Water Costs	\$	295,293	\$	103,353	\$	191,940		
				-	Annual Rate or				
Rate Breakdown	Cost		MEU/Usage	A	Annual Rate or Unit Rate		Per billing cycle		
Rate Breakdown Fixed Base O&M Costs	Cost \$ 103,353		MEU/Usage 812.5	\$		\$	Per billing cycle		
			, ,		Unit Rate	\$			
Fixed Base O&M Costs	\$ 103,353		812.5	\$	Unit Rate	\$			

#2 - Proposed Model D30 - Distribute across base and commodity components

* Includes new sewer debt component

	Model Rate	Current Rate	Billing Cycle Change \$	
Base Rates			enange y	
Water Base Rate	\$31.80	\$25.40	\$6.40	
Sewer Base Rate	\$48.17	\$32.75	\$15.42	
Commodity Rates				
Water Commodity	\$4.24	\$3.70	\$0.54	
Sewer Commodity	\$6.82	\$7.48	-\$0.66	
Sewer Debt Service	\$38.72	\$0.00	\$38.72	

Sewer Model - O	&М @ 35% Fix	ed (Charge and	65	% Commod	lity	/Usage based		
Cost Distribution		Total Costs			Fixed		Commodity		
		A.:-			35%		65%		
Operations and Maintenance			\$466,965		\$163,438	\$	303,527		
	Capital Assets				\$4,375	\$	8,126		
Depre	Depreciation Recapture				\$22,050	\$	40,950		
Fixed	Fixed Base O&M Costs				\$189,863	\$	352,603		
	Debt Service				\$152,626	\$	-		
	\$	695,092	\$	\$	352,603				
Rate Breakdown	Cost	M	EU/Usage		Unit Rate		Per billing cycle		
Fixed Base O&M Costs	\$189,863	985.5			\$192.66	\$	48.17		
Debt Service	\$152,626		985.5		\$154.87	\$	38.72		
Commodity	\$352,603		51,691 \$6.82				based on usage		
	\$695,092						15		

MODEL D30

(30% Depreciation, Distribute across all components

EXAMPLE

3/4" Water/Sewer Customer

Meter Size 0.75 1.00 AWWA MEU
Water Units 12,750 12,750
Sprinkler/Irrigation 0 (Gallons)
Sewer Only? NO

Sewer Only?		NO								
		Examp	le New Bill Modeled	Rates	П	ι	Jsing Current R	Change		
	Mo	del Rate	Units/Qty	New Bill		Current Rate	Units/Qty	Current Bill	\$ Change	Monthly
Water Charges	9									
Water RTS (O&M)	\$	31.80	1.0	\$31.80	\$	25.40	1.0	\$25.40	\$6.40	\$2.13
Water Commodity	\$	4.24	12,750	\$54.06	\$	3.70	12,750	\$47.18	\$6.89	\$2.30
Sewer Charges (Metered)									-	
Sewer RTS (O&M)	\$	48.17	1.0	\$48.17	\$	32.75	1	\$32.75	\$15.42	\$5.14
Sewer Debt	\$	38.72	1.0	\$38.72	\$		1	\$0.00	\$38.72	\$12.91
Sewer Commodity	\$	6.82	12,750	\$86.96	\$	7.48	12,750	\$95.37	-\$8.42	-\$2.81
	Total			\$259.70				\$200.70	\$59.00	\$19.67

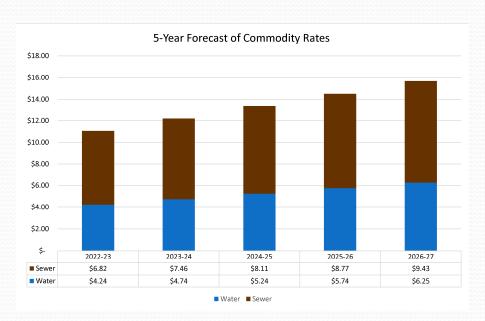
3" Water/Sewer Customer

Meter Size	3.00	17.50 AWWA MEU
Water Units	703,000	703000
Sprinkler/Irrigation	216,100 (Gall	ons)
Sewer Only?	NO	

		Exam	nple New Bill Modele	d Rates	U	sing Current	Change		
	M	odel Rate	Units/Qty	New Bill	Current Rate	Units/Qty	Current Bill	\$ Change	Monthly
Water Charges									
Water RTS (O&M)	\$	31.80	17.5	\$556.50	\$ 616.06	1.0	\$616.06	-\$59.56	-\$19.85
Water Commodity	\$	4.24	703,000	\$2,980.72	\$ 3.70	703,000	\$2,601.10	\$379.62	\$126.54
Irrigation Commodity	\$	4.24	216,100	\$916.26	\$ 3.70	216,100	\$799.57	\$116.69	\$38.90
Sewer Charges (Metered)	6								
Sewer RTS (O&M)	\$	48.17	17.5	\$842.89	\$ 493.76	1	\$493.76	\$349.13	\$116.38
Sewer Debt	\$	38.72	17.5	\$677.56	\$	1	\$0.00	\$677.56	\$225.85
Sewer Commodity	\$	6.82	703,000	\$4,794.46	\$ 7.48	703,000	\$5,258.44	-\$463.98	-\$154.66
	Tota	I		\$10,768.39	_	_	\$9,768.93	\$999.46	\$333.15

Five Year Forecast of Annual Costs and Charges (based on Model 2)





This forecast assumes:

- 3% annual cost growth/increase
- No change to debt service
- No change to total depreciation
- No change to MEUs
- Achieves 100% recapture of the 2023 total depreciation in 5 years
- No capital expenditures funded through rates (reserves only)